

Notice of Allowability

Application No.

09/057,786

Examiner

Hai Tran

Applicant(s)

BORSETH, JAY ALAN

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to 08/04/2005
2. ☒ The allowed claim(s) is/are 1-10, 13-16, 18-24, 26-30, 32, 34, 36-38 & 43-44
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 6/13/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

21

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with William J. Breen III on December 1st, 2005.

The application has been amended as follows:

Claim 1, A television tuner comprising;

A tuner software module to expose functionality of the tuner software module to an application program via an application programming interface and to find a particular **television** frequency **and a video decoder module to decode the digital video data according to a particular video standard** using:

A country table listing a plurality of countries; and

Multiple channel-to-frequency mapping tables correlating channel numbers to corresponding frequencies for associated countries in the country table, the channel-to-frequency mapping tables being indexed by the country table so that selection of a country in the country table references an associated channel-to-frequency mapping table for the selected country; and

A tuning device to tune to the found particular **television** frequency within the channel-to-frequency mapping table associated with the selected country upon selection of a corresponding channel.

Claim 5, a television tuning component for a television tuning system, comprising a tuner software module to expose functionality of the tuner software module to an application program via an application programming interface **and** to adjust the television tuning **circuitry to a particular television frequency, and a video decoder module to decode the digital video data according to a particular video standard** using:

A country table listing a plurality of countries; and

Multiple channel-to-frequency mapping tables correlating channel numbers to corresponding frequencies for associated countries in the country table, the channel-to-frequency mapping tables being indexed by the country table so that selection of a country in the country table references an associated channel-to-frequency mapping table for the selected country and selection of a channel in the channel-to-frequency mapping table maps to a corresponding frequency.

Claim 19, a television tuning manager for a television tuner, the television tuning manager being implemented in software stored on a computer-readable storage medium, the television tuning device comprising:

A country table listing a plurality of countries;

Art Unit: 2611

Multiple channel-to-frequency mapping tables correlating channel numbers to corresponding frequencies for associated countries in the country table the channel-to-frequency mapping tables being indexed by the country table so that selection of a country in the country table references an associated channel-to-frequency mapping table for the selected country;

A code segment to select a channel-to-frequency mapping table based upon input of a particular country;

A code segment to output a broadcast frequency from the selected channel-to-frequency mapping table based upon input of a corresponding channel; and

An application programming interface configured to expose functionality of the television tuning manager to an application ***program, and to find a particular television frequency; and***

A video decoder module to decode the digital video data according to a particular video standard.

Claim 26, One or more computer-readable media comprising computer-executable instructions that, when executed, direct a computer to expose an application program interface for a television tuning system to an application program, ***adjust the television tuning system, find a particular television frequency, and decode the digital video data according to a particular video standard.*** The application program interface being embodied on the computer-readable medium and having methods for performing the following functions:

Setting a current TV channel;
Retrieving the current TV channel;
Setting a country code;
Retrieving the country code;
Setting a storage index for regional channel to frequency mappings; and
retrieving the storage index.

Claim 27, One or more computer-readable media comprising computer executable instructions that, when executed, direct a computer to expose an application program interface for a television tuning system to an application program, ***adjust the television tuning system, find a particular television frequency, and decode the digital video data according to a particular video standard.*** The application program interface being embodied on the computer-readable medium and having methods for performing the following functions:

Retrieving all analog video TV standards supported by the tuning system;
Retrieving a current analog video TV standard in use;
Setting a current TV channel;
Retrieving the current TV channel;
Retrieving highest and lowest channels available;
Scanning for a precise signal on the current TV channel's frequency;
Setting a country code;
Setting a storage index for regional channel to frequency mappings;

Art Unit: 2611

Retrieving the storage index;

Retrieving a number of TV sources plugged into the tuning system;

Setting a type of tuning system;

Retrieving the type of tuning system;

Retrieving a current video frequency; and

Retrieving a current audio frequency.

Claim 28, a method comprising executing a software module configured to:

Expose functionality of the software module to an application **program** via an application programming interface, **and to find a particular television frequency and to decode the digital video data through a video decoder according to a particular video standard;**

Receive an ITU (International Telecommunications Union) code for a particular country; and

Select, based on the ITU code, a set of TV channel-to-TV frequency mappings for use in the particular country.

Claim 32, a method comprising exposing functionality of a tuner software module to an application program via an application programming interface, **and to find a particular television frequency and to decode the digital video data through a video decoder according to a particular video standard for:**

Receiving a reference to a country;

Art Unit: 2611

Selecting, based on the country reference, asset of channel-to-frequency mappings correlating channels to corresponding TV frequencies in the country and television standard;

Receiving a channel;

Selecting, based on the channel, a TV frequency that maps to the channel sending the frequency to the tuner circuitry;

Tuning to the frequency to receive a television signal carried by the channel;

Converting the television signal to digital video data; and

Decoding the digital video data at the video decoder software module using the television standard received in the tuning packet.

Claims 1-10, 13-16, 18-24, 26-30, 32, 34, 36-38 and ^{HWT}43-44 allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Tran whose telephone number is (571) 272-7305.

The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher C. Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HT:ht
12/29/2005


HAI TRAN
PRIMARY EXAMINER